Michigan Maternal Mortality Surveillance (MMMS) and Fetal Infant Mortality Review (FIMR) Aligned Recommendations

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Table of Contents

MMMS and FIMR Overview	<u>3</u>
MMMS and FIMR Collaboration	<u>4</u>
Alignment Methods	<u>5</u>
Alignment Categories and Themes	. <u>6 - 13</u>
Appendix A: Full Recommendations	<u>14</u>
Appendix B: Abbreviations and Acronyms	<u>28</u>

MMMS and FIMR Overview

MMMS

As the public health authority with statewide responsibilities, the Michigan Department of Health and Human Services (MDHHS) investigates maternal deaths via the MMMS program. The MMMS program works in partnership with a multidisciplinary Maternal Mortality Review Committee (MMRC) to review cases of maternal death, identify contributing factors present in each death, and develop recommendations based on those contributing factors. The MMMS program works in collaboration with the MMMS Recommendations Workgroup to implement recommendations developed through the MMRC process. For more information, please visit <u>Michigan.gov/MMMS</u>.



FIMR

FIMR uses a two-tiered system engaging a multi-disciplinary case review team and community action team. The case review team reviews case summaries from deidentified infant and fetal deaths and makes system change recommendations. The community action team, composed of community leaders, implements the recommendations. Local FIMR recommendations are submitted in the Michigan FIMR Local Recommendations Log and in the National Fatality Review Case Reporting System (NFR-CRS). For more information please visit, <u>Michigan.gov/FIMR</u>.



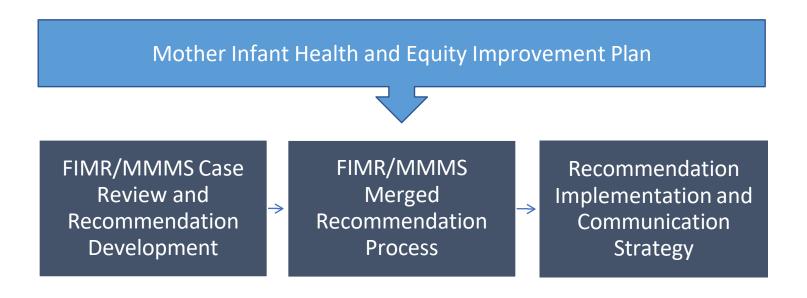
Introduction

Over the past few years, these two fatality review programs have been working to create a process for coordinating, collaborating and elevating aligned prevention recommendations for collective impact.

The purpose of this report is to amplify shared/aligned strategies for prevention of maternal, fetal, and infant deaths.

MMMS and FIMR are examples of two fatality review programs that deploy recommendations to improve outcomes for women, children, and families.

In September 2019, MMMS and FIMR programs were identified within the Full Term, Healthy Weight Babies priority area of the 2020-2023 Mother Infant Health Equity Improvement Plan and tasked with analyzing recommendations to improve alignment and provide actionable and locally relevant recommendations.



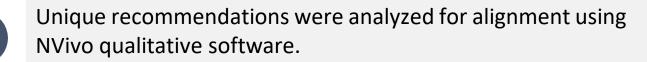
Alignment Methods

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During Fiscal Year 2022 local FIMR teams made 368 recommendations, and the MMRC made 160 recommendations. Of those, 362 FIMR recommendations were unique, and 93 MMMS recommendations were unique. Of the unique recommendations, 48.3 percent of FIMR and 69.9 percent of MMMS recommendations were aligned and are included in this report.



Auto coding, matrix queries, text queries, and manual alignment methods were used to identify alignment categories.

Alignment categories were further refined based on themes for action.

Themes for action were further refined based on subthemes, unless there were too few recommendations. Subthemes are not included in this report.

This report is organized by alignment category. Within each alignment category, the number of recommendations per program and themes for action are listed. An example of the results layout is listed below:

Alignment Category

Number of recommendations by FIMR and MMMS program Listing of themes for action

A full list of recommendations can be found in <u>Appendix A</u>. FIMR recommendations contain quotations to show they have not been modified.



Chronic Disease

- 5 FIMR and 2 MMMS Recommendations
- Improve Access to Quality Care.
- Improve Management of Pre-Existing Conditions.
- Address Environmental Conditions.

Continuity of Care

8 FIMR and 3 MMMS Recommendations

- Improve Access to Quality Care.
- Improve Provider/Patient
 Communication.
- Improve Care Coordination and Communication Between Providers.





Concordance

- **3 FIMR** and **1 MMMS** Recommendations
- Improve Access to Quality Care.
- Improve Management of Pre-Existing Conditions.
- Improve Provider/Patient
 Communication.
- Address Social Determinants of Health.



Communication and Education Campaigns

4 FIMR and 3 MMMS Recommendations

- Improve Trainings and Education.
- Improve Access to Quality Care.
- Improve Provider/Patient. Communication.

Emergency Services

5 FIMR and 3 MMMS Recommendations

- Improve Trainings and Education.
- Improve Access to Quality Care.
- Improve Care Coordination and Communication Between Providers.



Family Planning

12 FIMR and 1 MMMS Recommendations

- Improve Trainings and Education.
- Improve Access to Quality Care.
- Improve Provider/Patient Communication.
- Address Safety Issues/Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.
- Develop and Implement Prevention Initiatives, Screening, and Treatment Programs.



Geographic Access to Quality Care

1 FIMR and **1 MMMS** Recommendations
O Adopt Levels of Maternal Care.

Health Equity

12 FIMR and 7 MMMS Recommendations

- Improve Trainings and Education.
- Improve Access to Quality Care.
- Improve Provider/Patient Communication.
- Address Social Determinants of Health and/or Health Equity.
- Improve Care Coordination and Communication Between Providers.
- Address Environmental Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening and Treatment Programs.



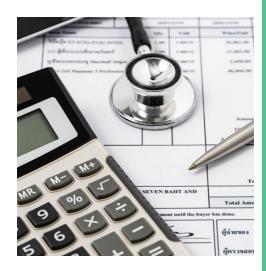
Infectious Disease

3 FIMR and 3 MMMS Recommendations

- Improve Trainings and Education.
- Improve Care Coordination and Communication Between Providers.
- Address Environmental Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening and Treatment Programs.

Interdisciplinary Care

- 7 FIMR and 1 MMMS Recommendations
- Improve Access to Quality Care.
- Improve Management of Pre-Existing Conditions.
- Improve Care Coordination and Communication Between Providers.
- Address Environmental Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening and Treatment Programs.



Insurance Coverage

2 FIMR and 3 MMMS Recommendations

- Improve Access to Quality Care.
- Address Social Determinants of Health and/or Health Equity.
- Improve Care Coordination and Communication Between Providers.
- Address Safety Issues/Conditions.

Legal System

- 2 FIMR and 1 MMMS Recommendations
- Improve Management of Pre-Existing Conditions.
- Address Social Determinants of Health and/ or Health Equity.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.



Medical Documentation and System Interoperability 9 FIMR and 2 MMMS Recommendations

- Improve Access to Quality Care.
- Improve Care Coordination and Communication Between Providers.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.



Prenatal Care 3 FIMR and **1 MMMS** Recommendations

- Improve Trainings and Education.
- Improve Access to Quality Care.

Mental Health

27 FIMR and 6 MMMS Recommendations

- Improve Trainings and Education.
- Adopt Levels of Maternal Care.
- Improve Access to Quality Care.
- Improve Management of Pre-Existing Conditions.
- Improve Provider/Patient Communication.
- Address Social Determinants of Health and/or Health Equity.
- Improve Care Coordination and Communication Between Providers.
- Address Environmental Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.
- Develop and Implement Prevention Initiatives, Screening, and Treatment Programs.



Provider Support

- 4 FIMR and 3 MMMS Recommendations
- Improve Trainings and Education.
- Improve Access to Quality Care.
- Address Social Determinants of Health and/or Health Equity.
- Improve Care Coordination and Communication Between Providers.
- Address Environmental Conditions.



Social Support

5 FIMR and 2 MMMS Recommendations

- Improve Access to Quality Care.
- Address Social Determinants of Health and/or Health Equity.
- Address Environmental Conditions.

Social Determinants of Health

14 FIMR and **4 MMMS** Recommendations

- Improve Trainings and Education.
- Improve Access to Quality Care.
- Address Social Determinants of Health and/or Health Equity.



- Improve Care Coordination and Communication Between Providers.
- Develop and Implement Prevention Initiatives, Screening, and Treatment Programs.

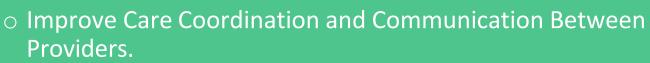


Trauma-Informed Care

- 3 FIMR and 1 MMMS Recommendations
- Improve Access to Quality Care.
- Improve Management of Pre-Existing Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.

Substance Use Disorder

- 23 FIMR and 12 MMMS Recommendations
- Improve Trainings and Education.
- Improve Access to Quality Care.
- Improve Management of Pre-Existing Conditions.



- Address Environmental Conditions.
- Address Safety Issues/Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.
- Develop and Implement Prevention Initiatives, Screening, and Treatment Programs.



Wrap Around Services

23 FIMR and 5 MMMS Recommendations

- Improve Access to Quality Care.
- Improve Provider/Patient Communication.
- Address Social Determinants of Health and/or Health Equity.
- Improve Care Coordination and Communication Between Providers.
- Address Environmental Conditions.
- Address Safety Issues/Conditions.
- Improve Policies Regarding Systems of Care, Prevention Initiatives, Screening, and Treatment Programs.







Appendix A: Full Recommendations

Chronic Disease

"Intra-conception care especially related to weight management and nutrition."

"Pre-conception care and counseling especially with regards to hypertension and diabetes."

"Pre-conception care and counseling especially with regards to weight management and spacing of pregnancies."

"If BMI is over a certain percentage automatic. Provide safe sex protection education in addition to birth control planning."

Partner with Family Planning and Chronic Disease programs to provide contraceptive counseling and reproductive life planning education to providers working with individuals of reproductive age.

Preconception care and interventions to prevent and treat chronic disease and awareness of reproductive health are crucial elements which should be targeted before pregnancy for ensuring improved pregnancy, neonatal and child health outcomes.

"Increased preconception couseling on the implications of diabetes in pregnancy via multiple disiplines such as OB providers, primary care physicians, and/or endocrinologists, etc."

Continuity of Care

"Improve provider-to-patient communication."

"Make phone calls to follow up after missed or cancelled appointments, especially pediatric."

"Providers should follow up to ensure postpartum visit is kept and attended."

Encourage providers to make appointments for patients upon discharge.

Encourage providers and hospital discharge planners to link patients to care and to provide them with a warm hand-off.

"Improve provider communication between offices/health systems."

"Improve provider-to-provider communication."

"Incorporate collaborative care decision making among all provider types for treatment of mother of baby (MOB) with depression."

"Increase communication between providers, especially when utlizing multiple health systems."

"To improve provider-to-provider conversations around patients with complex medical disease that foster care team community support."

Promote warm handoff for transferring patient to substance use treatment prior to being discharged from hospital.

Note: FIMR recommendations contain quotations to show they have not been modified.

Concordance

"Review of complaints that are causing mothers to withdraw from treatment or change in service providers."

"Providers should seek to understand reasoning behind patients declining treatments/services/resources recommended."

"Ensure follow-up for patients who may have declined services to see if circumstances have changed."

Adequate documentation is needed to explore why patients leave against medical advice (AMA). Communication and Education

"Education for youth on basic physiology, health, and pregnancy."

Provide universal education on healthy relationships and information on health, consent and safety.

"More emphasis on the Hear Her campaign."

"Reinforce CDC's "Hear Her" Campaign to improve relationships and communication between moms and providers."

"More public service announcements/education geared towards expecting mothers (include family/friends support systems) using common language to explain medical terms that may be utilized by the professionals they make contact with."

Increase awareness of urgent maternal health warning signs and connect women who have chronic health conditions or a family history of chronic health conditions to specialized care.

The MMRC will increase awareness and visibility of behavior health options, including the University of Michigan MC3, to prenatal care providers, birthing hospitals, and emergency departments using the department's communication strategies and processes.

Emergency Services

"Promote the utilization of "problem visit" appointment at OB clinics instead of going into the ER for emergent care related to pregnancy."

"Education regarding utilizing ED during pregnancy, as in when is appropriate, the possible outcomes of ED visits opposed to prenatal care, as well as the risk and reward factor."

Increase awareness of when it is necessary to call 911/EMS.

"Greater communication/referrals between Eds and OB/GYNs."

"Implement a care coordination system between the ED and OB clinic – especially for those who are not previously established with any OB office, but have been seen at the ED."

"OB consult for all pregnant women who present to the ED."

Support and promote the use of CMWs in the EDs, who could spend more time with patients – to alleviate the demand on providers.

Integrate recovery coaches into emergency departments to help patients with substance use disorders connect to the care and support they need.

Family Planning

"Home Visiting with Education on Pre and Interconception."

"Increase access to contraception."

"When clients have a history of birth spacing less than 18 months apart, programs and social services (i.e., MIHP, Sisterfriends) to teach women about ovulation, pregnancies and reproductive health."

"Education on birth control after delivery."

"Increase and improve reproductive education (contraception)."

"Increase education about contraception options."

"Provide safe sex protection education in addition to birth control planning."

"Wrap-around services on education surrounding preparing patient's body and healing in-

between pregnancies, risk with having back-to-back births that include hormonal changes, post-

partum depression, physical restrictions, and the need for folic acid. Educate mothers on recommended spacing 18-24 months.

"Increase patient education about family planning and resources."

"Increase postpartum family planning education during prenatal visits and before discharge from the birth hospital."

Increase awareness of family planning services for men and women.

"Include fathers/partners in family planning discussions."

"Family Planning for both partners."

Geographic Access to Quality Care

"Specialists traveling to smaller care areas in order to see high risk patients, removal of barrier." Reinvigorate the perinatal regionalization so patients receive care at the appropriate facility.

Health Equity

"Equitable care for all patients, to insure they receive the same level of care."

"Develop standardized pain-related care pathways with an equity focus for all patients."

"Encourage birthing-parent communication and self-advocacy when seeking social services resources."

"Instate all institutions and providers moving toward person-centered language."

"Instate all institutions and providers moving toward person-centered, correct, respectful language around people with disabilities, pronouns, etc."

"Greater utilization of the Association of Women's Health, Obstetric, and Neonatal (AWHONN) "Respectful Care" toolkit."

"Continue to provide patients all needed information and education for them to make informed choices while ultimately respecting patients' choices."

"Implement policies that allow providers to give individualized patent-centered care (i.e. more time)."

Believe women. The MMRC expects providers, communities, and systems to trust, hear and listen to women.

When talking to patients about their substance use, providers should use an empathetic and objective approach.

"Encourage motivational interview practices to elicit cultural considerations in patients' decision making."

"If there is a denial of birth control, health care professionals to follow-up with clients due to cultural or religious beliefs to understand these influences and have cultural competency."

"Begin to entrust providing the best, culturally competent evidence through trusted individuals/groups."

Encourage outside agencies (i.e., non-tribal agencies and programs) to collaborate with tribal organizations to increase awareness of comprehensive health care resources, supports and community resources that exist.

MMRCs, in conjunction with MDHHS, will increase access to education for providers and systems on delivering culturally competent care and reducing stigma, bias and barriers when implementing services and recommend that all providers are exposed to implicit bias training that leads to use of best practices for dignity and respectful care.

"Social worker should inquire if there are specific cultural or language barriers that are experienced and if those factors contribute to mother's medical decisions, grief process, family transition, beliefs regarding termination and other factors."

Expand the availability of video/web-based language interpretive services (verbal and sign language) for first responders and hospitals to utilize 24/7.

Increase access to medical translation services and expand services in emergency departments. Hospital systems should review policies that impact patients with SUD during hospitalization and providers should use an empathetic and objective approach when talking to patients about their substance use – improvement of medical staff communication may decrease the likelihood of women who leave against medical advice and improve health outcomes of pregnant and/or parenting women.

Infectious Disease

"Healthcare facilities to follow MDHHS guidelines on having written procedures for prenatal testing of HIV, Hepatitis B, Hepatitis C, and syphilis."

"Implement routine education and testing for people of childbearing age and how infections or other STIs can impacts pregnancy."

Confirmatory HIV testing should be performed at the request of patients and documented. "Improve education around vaccines while pregnant (COVID and others)."

Promote and increase awareness of the need for pregnant and breastfeeding women (pre-conception, inter-conception, post-conception) to get vaccinated for influenza.

Providers encouraging and educating patients to be vaccinated against influenza following ACOG's guidelines/recommendations.

Interdisciplinary Care

"Provide MFM referrals."

"Refer high-risk pregnancies and babies to home care agencies to design at home protocols that are specific to each case and document referrals in patient files."

"Proper planning for high-risk pregnancies."

"Consistent referral process."

"Improve the processes around outgoing referrals, ensuring follow through and accuracy."

"Develop a contact visit list for MOBs of high risk pregnancies that includes formal and informal contacts that are important for MOB to be seen by."

"Increase personalized care/referrals."

Work with hospitals to ensure patients with high-risk pregnancies and specialized cases are seen by specialized staff and interdisciplinary care teams, in a coordinated manner.

Insurance Coverage

"Implementation of private and Medicaid insurance coverage of home births as well as increased education on the risk factors associated with home birth."

"Medicaid limits of clients seen by provider (More providers willing to accept Medicaid or Medicaid to allow more providers to bill - CAT recommendations)."

Advocate for more coverage of prescription medications.

Increase awareness and access to medical coverage options.

Work with Medicaid to support alternatives to Medicaid non-emergency medical transportation, including ride share, to address logistical difficulties related to transportation and childcare.

Legal System

"Increase referrals to CPS "Prevention" program after deliveries with a mom positive for an illicit substance."

"Be considerate of the potential consequences (CPS) MOB can face when asking for help."

Work with CPS to create systematic change around policies regarding follow-up,

prevention services for high-risk women, and care coordination.

Medical Documentation and System Interoperability

"Better coordination of records/care when multiple hospitals (systems) are involved in the care for a patient."

"Encourage providers to request/utilize access to health record systems used locally, such as EPIC."

"Establish EHR access for non-medical community/social providers to minimize disconnect between medical care teams and social care teams."

"Evaluate how the medical records from varying health systems can be shared across systems."

"Improve access for health departments to large, shared medical databases to inform and improve their population health platforms."

"Improve consistency among all medical documentation from each health provider MOB makes contact with."

"Improve healthcare record interoperability and general coordination for shared patients between OB and mental health providers."

"Improve OB provider healthcare record interoperability."

"Improve the consistency of medical documentation across provider types and institutions."

Elevate and enforce MAPS requirements through the Michigan Department of Licensing

and Regulatory Affairs (LARA) including a flagging system that alerts LARA.

Have EMRs/EHRs interoperable to order to make records more accessible.

Prenatal Care

"Increase education around the importance of prenatal care."

"Messaging around the importance of prenatal care for underage parents."

"Prenatal importance education for every pregnancy continual within community."

Pregnant patients need to be connected to accessible, appropriate prenatal care.

Mental Health

"Mother recommends that families should be offered counseling immediately after they find out diagnosis of infant."

"Embed and utilize therapy or counseling services in Maternal Fetal Medicine clinics and high risk pregnancies to support parents dealing with mental health histories and/or crisis."

"Increase promotion and utilization of MC3 among providers."

"Improve availability of Mental Health Services for pregnant women."

"Removal of barriers for mental health services offered for mother who must be home with other children, virtual/in home offering."

"Improve availability and follow up for mental health counseling services."

Expand access and ensure continued mental health and SUD services are provided to those incarcerated.

Promote the National Suicide Prevention Lifeline and support expanding the capacity of the program in Michigan.

"Support referrals for mental health treatment during pregnancy."

"Provide counseling and/or support groups for stress reduction."

"Continue perinatal counseling and discussion with families who have predicted poor birth outcomes."

"Due to previous loss, MIHP is recommended for home visits so there can be an ongoing mental health status report."

"Refer moms to mental health services"

"Require mental health/cognitive disability follow-up care."

"Utilize provider to provider consultation for perinatal mental health support through MC3."

"Warm hand-off of continuum of care; mental health, substance use, social services"

"To increase the frequency of referrals to MC3 services by providers from quarterly to bi-monthly."

"To increase the population receiving/disseminating MC3/mental health referrals to include residents, attendees, medical social workers, psychiatrist, nurse practioners, etc."

"Continuous mental health consultations throughout pregnancy for expectant mothers with history of mental illness."

"Follow-up regarding mental health history and medication review. This should be coupled with a social work interview throughout the pregnancy. There would be a benefit to the mother (caregivers) and support system to connect prenatal care with existing mental health therapist."

Require social work consults for all pregnant or postpartum patients with substance use disorder, IPV, past trauma and/or mental health disorders including referrals to appropriate follow-up care and support such as MIHP.

"Mental health work-up from hospital based on mental health history, when patient is requesting help."

"Develop skills training for health care workers to support patients through care who have intense histories of mental abuse/sexual abuse/trauma."

Follow the standard of care for treatment of anxiety disorders.

Mental Health (continued)

"Provide physicians/residents with more education about MC3 as a MH resource. Implement into resident grand rounds."

"Undiagnosed mental health, social interventions for mother and family unit."

"Review Edinburgh score at delivery or shortly after."

"Require biopsychosocial assessment be conducted at the beginning of services to best gauge current emotional state, developmental processing, and life skills that influence their ability to care for self and family."

"Implement an OB-specific protocol for preconception mental health screenings for patients who are family planning to identify risks."

"Routine screening of mom's life stressors and coping mechanisms at prenatal appointments"

Provide universal rescreening by home visiting professionals/family support professionals and medical providers for IPV, substance use, mental health during visits once a rapport with the client has been established.

"Family inclusion, to include mother of baby and father of baby family therapy sessions to diminish the mental and behavioral health outcomes of the family involved."

Individuals should practice risk reduction/risk mitigation when a loved one is suicidal or with mental health conditions (e.g., removing guns from residence, locking guns).

Provider Support

"Support and funding more staff in the mental health field with diverse backgrounds."

"Increase funds to support frontline staffing (mid-wives, doulas, CHWs, etc.)"

Advocate for sustained funding of hospital social workers and case managers who are integral

to the interdisciplinary team to connect women to resources and referrals for needed services.

"Create sustainable working environment for SWs and CHWs."

"Create culture to reduce burnout."

Advocate for more therapists to be available to support health care workers.

Promote and provide resources for health care workers on trauma.

Social Support

"Facilitate coordination between clinical spiritual care teams and community churches/pastors to support families."

"Fatherhood support. Inclusion of fathers and partners throughout care journey."

"Family inclusion, to include mother of baby and father of baby family therapy sessions to diminish the mental and behavioral health outcomes of the family involved."

"Identify early on persons to include in patients social support team and provide education to them throughout care."

"Increase inclusion of families in appointments to support MOB, especially when providers share difficult medical diagnoses."

Consider using delivery discharge instructions to connect mom and dad with resources to address their unmet needs and explore opportunities to collaborate with the Women Inspired Network (WIN) and the Institute for Population Health's Heathy Start Fatherhood Program.

Recommend expanding and supporting opportunities to engage in peer support prevention programs.

Social Determinants of Health

"Improve community knowledge regarding the vast resources WIC provides aside from formula and diapers."

"Expand access to affordable licensed childcare."

"Provide universal paid maternity leave."

"Implement policies that increase upstream access for families (education, resources, etc.)."

"To provide childcare for families during hospitalization in regards to COVID protocols around family visitation."

"More information needed on all support services."

"Connecting families to existing support teams and resources."

Consider using delivery discharge instructions to connect mom and dad with resources to address their unmet needs and explore opportunities to collaborate with the Women Inspired Network (WIN) and the Institute for Population Health's Heathy Start Fatherhood Program.

Streamline governmental assistance application processes and administrative requirements so it's easier for pregnant and parenting people to obtaining assistance.

"Utilize a "Resource-First" approach while ensuring multiple touchpoints for referring patients to services."

"Clarify WIC enrollment process, especially with the new changes to the application."

"Create more quality, affordable, safe housing for family (free of barriers)."

"Design in association with Detroit Housing Department to house homeless pregnant mothers to secure a path to housing for low-income mothers."

"Resources for Housing should be provided (including the 800-241-4949 DWIHN) when housing concerns are noted by mother."

"Improve ways in which families have to navigate through housing sectors (make user friendly)" "No affordable housing, rent set too high for area income."

Increase shelter capacity for women with SUD, co-occurring disorders and examine strategies for improving access to supportive recovery housing.

Pregnant and parenting women should have access to stable and secure housing to improve women's health. Without, moms are at an increased risk of relapse into addiction.

Trauma-Informed Care

Promote victim services programs, like the Michigan State Police Victim Services Program, to increase awareness of trauma-informed support and advocacy services available to victims of crime.

"Implement trauma-informed care practices."

"Trauma-informed care along continuum."

"Implement a standardization of care and treatment for patient with intense mental abuse/sexual abuse/trauma histories."

Substance Use Disorder

"Substance use programs/information/effects due to multiple urine drug screen test results for substances."

Expand access of Narcan distribution to be provided from jails along with corresponding education on use.

Increase access to integrated care for SUD interventions and services.

Increase awareness of services that provide support and resources to individuals affected by substance use disorder for example Families Against Narcotics.

Promote mental health and SUD services to support patients and families, including the Substance Use Hotline (Peer Warmline), 211, and 988.

Recommend expanding and supporting opportunities to engage in peer support prevention programs.

Support the initiation of medication assisted treatment (MAT) in emergency departments.

"She needed a referral to inpatient services. Referral to a type of facility where moms could receive prenatal care as well as addiction services."

"There should be more education and resources provided that deal with the intersection of mental health and substance abuse."

Increase the availability and education for use of Narcan.

"Routine follow-up on all positive maternal urine drug screens (confirmation testing and/ or umbilical toxicology screens)."

"Positive drug use should be referred to social worker for evaluation and follow-up to make sure mother is in compliance with making necessary appointments."

"Provide examples of healthy coping mechanisms (i.e. exercise) for patients who self-medicate."

"Education on marijuana use during pregnancy."

"Educate pregnant mothers on the risks of vaping during the pregnancy and after birth to the infant's environment."

"Mandatory drug education (including a 3200 filed) for positive marijuana use throughout pregnancy and at delivery. Topics to include need for treatment, education on alternatives for nausea/anxiety/mental health, physical conditions that may result, and the growth and developmental delays that can be caused by drug a cigarette use in pregnancy."

"Increase education around marijuana use during and after pregnancy."

"Increase information around substance use (and management) during pregnancy and after birth."

"Increased education for dispensaries and increased public awareness on the harms of marijuana use during pregnancy, while breastfeeding, and supervising children."

"Provide education about drug use."

Increase awareness and education around the need to spread information to the SUD community about signs and symptoms of an overdose.

"Universal drug ccreen to be completed for any mother presenting in labor and delivery."

"Universal drug screen at the time of labor and delivery of mother and infant."

Substance Use Disorder (continued)

"Universal drug screen to be completed for all mothers in labor and delivery and subsequent testing for newborn."

"Universal drug screening to be completed at intake for all mothers, despite denying substance abuse. This is to ensure all patients are treated equally and to track trends as well."

"Universal drug testing for all obstetrical patients."

"Universal drug testing for all pregnant women."

"Confirmatory testing for THC after a positive screening result is found."

"Routine umbilical cord toxicology screening (including alcohol) on all newborns born to moms with known or suspected substance use during pregnancy."

"During labor and delivery, require universal drug screen to be completed before clients are discharged."

Implement substance use screening (including alcohol and tobacco) at first prenatal visit, throughout pregnancy and postpartum visits – including ED visits.

Provide universal rescreening by home visiting professionals/family support professionals and medical providers for IPV, substance use, mental health during visits once a rapport with the client has been established.

Urine drug screen should be performed when history of SUD provided upon admission.

"Improve screening/education related to alcohol use at prenatal appointments."

"Education around smoking during pregnancy."

Wrap-around Services

"Wrap-around care from preconception to post-conception to increase access to care and streamline referrals to social services"

"Continue to implement multidisciplinary integrative care referrals (from providers, community health workers (CHWs), psychiatrist, etc.)."

"Increase provider numbers of social workers, CHWs, and home vistors, the number of their programs, and institutional support for all."

Offer women wrap-around services to help align systems of care and transform every interaction into a potential opportunity for change.

"Increase availability of visiting home nurse for newborns and their families."

Increase access to home visiting/family support services for all pregnant and postpartum women in Michigan.

"Improve marketing strategies on home visitation and its evidence to encourage uptake of services."

"Bereavement services are necessary for all parents of deceased child. A discharge plan can be initiated with scheduled appointment for after care by social worker to assist with services being followed through with, as well as the benefit of group therapy sessions for trauma."

"Continue quality care coordination among social services."

"Engage frontline providers/CHWs/etc. recommendations to address gaps in disparities in communication, education, and follow-up for high-risk pregnancies."

"Emphasize outreach and care coordination for high risk birthing persons in order to provide ongoing perinatal care through the utilization of HV programs."

"Implement standardized protocol for social workers to follow up and provide resources and contact information to MOB postpartum especially if MOB wasn't ready to have a conversation regarding her loss during time of appointment."

Encourage providers and hospital discharge planners to partner with doulas, community health workers, family support professionals and home visiting programs to improve access to care and provide peer support to pregnant and parenting women.

"Implement the co-location of CHWs within medical/clinical setting."

"Empower CHWs to contact home visitation programs to provide medical summaries of MOBs' case for a more complete referral."

"Implement CHW as liaison between the patient and the provider, on behalf of the patient."

Wrap-around Services (continued)

"When there is a history of SAB's, social work consult should be offered to assist mother navigate possible upcoming emotions to teach coping ahead skills and stress management skills."

"Where there is noted that mother denies medical intervention or proves to be non-compliant with treatment that increases risk of fetal loss, therapeutic intervention should be offered in the form of social work consult, therapeutic resource, and educational materials."

"Wrap-around services for: (1) nutrition consult referral be provided to all mothers at unhealthy weight and risk to self and baby; (2) therapist referral for stress management/life skills development/compulsive control to address underlying conditions contributing to poor nutrition."

Require social work consults for all pregnant or postpartum patients with substance use disorder, IPV, past trauma and/or mental health disorders including referrals to appropriate follow-up care and support such as MIHP.

"Increase the utilization of postpartum doulas."

"Incorporate doula services as a part of the palliative care team to act as liaison on behalf of MOB and family in the clinical space."

"Organize HV programs based on eligibility criteria to clarify the appropriate support for families' needs."

"Wrap-around services regarding home visit follow-up with trained advocates."

"Home visiting programs to have access to patient medical records."

"Home visiting referrals by the obstetrician for teenage first time mothers."

Women need to be connected to family support programs/services (home visiting, doulas, community health workers, etc.) to facilitate communication between patient and provider to elevate the patients' voice/concerns.

"Early referral to home visiting for subsequent pregnancies."

Appendix B: Abbreviations and Acronyms

ACOG: American College of Obstetricians and Gynecologists

BMI: Body Mass Index

CAT: Community Action Team

CHW: Community Health Worker

CMW: Community Midwife

COVID: Coronavirus Disease

CPS: Children's Protective Services

ED: Emergency Department

EHR: Electronic Health Record

EMR: Electronic Medical Records

EMS: Emergency Medical Services

EPIC: Electronic Health Records/Charting System

ER: Emergency Room

HIV: Human Immunodeficiency Virus

HV: Home Visitor/Visiting

IPV: Intimate Partner Violence

MAPS: Michigan Automated Prescription System

MAT: Medication-Assisted Treatment

MDHHS: Michigan Department of Health and Human Services

MFM: Maternal Fetal Medicine

MH: Mental Health

Appendix B Continued: Abbreviations and Acronyms

MIHP: Maternal Infant Health Program

MJ: Marijuana

MMRC: Maternal Mortality Review Committee

MOB: Mother of Baby

OB: Obstetrics and Gynecology

SAB: Spontaneous Abortion

STI: Sexually Transmitted Infections

SUD: Substance Use Disorder

SW: Social Work

THC: Tetrahydrocannabinol

WIC: Women, Infants and Children program